CITY OF ROCKLIN

ENGINEERING TECHNICIAN I
ENGINEERING TECHNICIAN II

DEFINITION

To perform para-professional engineering office and field work involving surveying, design of public works facilities, construction inspection and drafting; and to perform related work as required.

DISTINGUISHING CHARACTERISTICS

Engineering Technician I: This is the entry level class in the Engineering Technician series. This class is distinguished from the Engineering Technician II series by the performance of the more routine tasks and duties assigned to positions within this series. Employees at this level are not expected to perform with the same independence of direction and judgment on matters related to established procedures and guidelines as are positions allocated to the II level. Since this class is typically used as a training class, employees may have only limited or no directly related work experience. Employees work under immediate supervision while learning job tasks.

Engineering Technician II: This is the full journey level class within the Engineering Technician series. This class is distinguished from the Engineering Technician I by the performance of the full range of duties as assigned, including the ability to work independently exercising initiative and judgment. Employees at this level receive only occasional instruction or assistance as new or unusual situations arise and they are fully aware of the operating procedures and policies within the work unit. Positions in this class are flexibly staffed and are normally filled by advancement from the I level, or if filled from the outside, requires prior work experience.

SUPERVISION RECEIVED AND EXERCISED

Engineering Technician I

Receives general supervision from the Department Head, and may receive technical and functional support from an Associate Engineer and/or Engineering Technician III.

Engineering Technician II

Receives general supervision from the Department Head, and may receive technical and functional support from an Associate Engineer and/or Engineering Technician III.

EXAMPLES OF ESSENTIAL FUNCTIONS – *Essential functions may include, but are not limited to, the following:*

Interpret engineering maps, plans, construction standards and legal descriptions.

Provide information and answer questions for consulting engineers, contractors, and the general public, as well as City staff members; prepare engineering reports as assigned.

Review plans, maps, specifications, with established engineering practices; check calculations used in designs and estimates.

Make calculations in surveying and other construction work and perform field inspections.

Perform office engineering work such as making maps, drawings, tracings, profiles, tabulating field data.

Operate Ozalid blueprint machine.

Utilize Computer-Assisted Drafting software to create and modify engineering drawings, topographic maps, improvement plans and illustrative graphics.

Prepare illustrative graphics such as charts, illustrations, graphs for reports, drawings for design manual and other projects.

Resolve conflicts between owners, contractors, developers, utility companies, and others.

Review parcel maps, subdivision maps and improvement plans as required.

Perform traffic counts and other special studies; recommend corrective traffic control to mitigate traffic problems.

Operate transit, level, alidade, and other survey instruments in the performance of control, preliminary, and construction surveys, monument checks and related projects.

Perform related duties as assigned.

QUALIFICATIONS

Engineering Technician I

Knowledge of:
Drafting and surveying equipment, computers, principles, problems, techniques and practices.

Safe work practices and methods.

Construction practices and methods.

Ability to:
Learn State Subdivision Map Act.

Make accurate engineering computations and drawings.

Learn Computer-Assisted Drafting software and Ozalid blueprint machine.

Perform responsible field and office work.

Interpret complex construction plans and specifications.

Use and care for engineering and drafting instruments and equipment.

Prepare written reports and correspondence.

Communicate clearly and concisely, both orally and in writing.

Establish and maintain effective working relationships with those contacted in the course of work.

EXPERIENCE AND TRAINING

Any combination of experience and training that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

Experience:
One year of para-professional civil engineering experience is desirable.

Training:
Equivalent to the completion of the twelfth grade supplemented by college level courses in math, drafting and surveying.

License or Certificate:
Possession of, or ability to obtain, a valid California driver's license.

Engineering Technician II

In addition to the qualifications for Engineering Technician I:

Knowledge of:
Civil engineering principles, practices and methods applicable to office and field work involving the design, construction and maintenance of public works projects.

State Subdivision Map Act.

Ability to:
Prepare accurate plans, specifications, cost estimates and technical engineering reports.

Modify engineering drawings, topographic maps, improvement plans and illustrative graphics using Computer-Assisted Drafting (CAD) software.

Read and understand technical drawings and specifications.

EXPERIENCE AND TRAINING

Any combination of experience and training that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

Experience:
Eighteen months to two years of experience performing duties comparable to those performed by an Engineering Technician I with the City of Rocklin.

Training:
Equivalent to the completion of the twelfth grade supplemented by college level courses in math, drafting and surveying.

TYPICAL WORKING CONDITIONS

Assigned work is normally performed in an office environment. Incumbents may be assigned to survey or inspection work, which will require exposure to traffic and weather conditions. Incumbents may drive on surface streets for short periods of time.

TYPICAL PHYSICAL REQUIREMENTS

On an intermittent basis, sit at a desk for long periods of time; intermittently walk, stand, bend, squat, twist and reach while retrieving and/or returning files, plans, and other engineering documents; perform simple grasping and fine manipulation; maintain effective audio-visual discrimination and perception needed for making observations, communicating with others, reading and writing, and operating assigned office and engineering equipment; use a telephone to communicate verbally and use a keyboard to communicate through written means, to review information and enter/retrieve data; see and read characters on computer screen; lift light weights; maintain mental capacity which allows for effective interaction and communication with others.

This class specification lists the major duties and requirements of the job and is not all-inclusive. Incumbents may be expected to perform job-related duties other than those contained in this document.